TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER REQUEST FOR TASK PLAN / TASK ORDER CONTRACT NO /TASK NO. JOB ORDER NUMBER CONTRACTOR NAS5-TASK NO. AMENDMENT 23 99124 QSS Group, Inc. 25-227-61-10-89 FY00 TASK TITLE: (NTE 80 characters; include Project name) ICESat Fault Tree and Problemistic Analysis Engineering Services APPROVALS: (Type or print name and sign) ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITO MAIL CODE PHONE 301-425 286-2321 Michael Tasevoli 7/18/00 730 BRANCH HEAD CODE 301 -7/18/00 425 286-5102 Joseph Dezio CONTRACTING OFFICER'S T ICAL REPRESENTATIVE (COTR) CODE PHONE 560 301-286-6382 Robert S. Lebair, DESIGNATED FAM: FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? CONTRACTING OFFICER'S QUALITY REP. '(IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK Larry Moore 2000 I I YES The contractor shall identify and explain the reason for any deviations, exceptions, (To be completed by Contracting Officer) C.O. Requested Quote on: or conditional assumptions taken with respect to this Task Order or to any of the Date: technical requirements of the Task Order Statement of Work and related specifications. aug The contractor shall complete and submit the required Reps and Certs. Contractor will develop specification or statement of work under this task for a future procurement. [] YES [x] No Flight hardware will be shipped to GSFC for testing prior to final delivery. I 1 YES Ixi No Government Furnished Property/Facilities: [] YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only) [x] No Onsite Performance: [X] YES If yes: [x] TOTAL [] PARTIAL [] No If partial, indicate onsite work in SOW by asterisk (*) Surveillance Plan Attached: [x] No [] YES Highlighted Contract Clauses: (to be completed by Contracting Officer) The effective date of this task order is the date of the Contracting Officer's signature below. INCENTIVE FEE STRUCTURE (check one) (See Contract NAS5-99124, Attachment K, Incentive Fee Plan) No. 2 No. 3 No. 4 No. 5 x No 1 10% 50% 25% 25% % Cost % Schedule 15% 25% 25% 50% 25% Technical 25% 75% 50% The target cost of this task order is \$ 61,036 The target fee of this task order is \$ 3,967 The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 65,003 The maximum fee is \$ 5,798 The minimum fee is \$0. AUTHORIZED SIGNATURE: ELIZABETH J. AUSTIN SK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS" CONTRACTING OFFICER TYPED NAME OF CONTRACTING OFFICER SIGNATURE OF CONTRACTING OFFICER CONTRACTOR'S ACCEPTANCE: AUTHORIZED SIGNATURE

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR CONTRACT NO. (PASK NO.			
	NAS5-	TASK NO.	AMENDMENT
QSS Group, Inc.	99124	323	

Applicable paragraphs from contract Statement of Work:

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

The contractor shall perform a comprehensive study of hazardous events in the ICESat observatory, instrument and spacecraft subsystems and operations and an analysis of the probability or frequency of top-level undesirable events. Using approved tools, mission documents and relevant analysis, the contractor shall complete and deliver an ICESat Fault Tree analysis and Probabilistic Risk Assessment which complies with the appropriate NASA reference documentation and guidelines.

The contractor shall develop a plan and schedule with key milestones for the entire effort and provide regular updates and status regarding progress and problem areas. Significant issues shall be quickly identified that require immediate attention. The contractor shall identify documentation and/or data with need dates to perform the work required in this SOW. Proposed tools shall be identified and fully described.

No travel is anticipated to accomplish the work in this task.

PERFORMANCE SPECIFICATIONS:

The analysis is acceptable if the top level event have been identified and that all lower level causes have been clearly shown and completely decomposed down to the level that is consistent with the ICESat FMEAs results In addition, the analysis results shall utilize the approved tools and techniques

APPLICABLE DOCUMENTS:

ICESat Mission System Requirements Document ICESat Spacecraft Performance Specification ICESat Spacecraft FMEA **GLAS FMEA** GLAS ICD GPS ICD

NASA Reference Publication 1358 System Engineering Tool Box The Fault Tree Handbook, NUREG-0492 January 1981

TASK END DATE:

4/30/01

MILESTONES/DELIVERABLES AND DATES:

ICESat Mission Fault Tree Analysis and Probabilistic Risk Assessment Report 1/31/01

PERFORMANCE STANDARDS:

Schedule: Submit report by due date

Technical: Report complies with NASA requirements for this type analysis

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Michael Tasevoli, building 16, room 240